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| 09/936,137      | 09/07/2001  | Reinier Bernardus Maria Klein Gunnewiek | PHNL 000344         | 9446             |

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER

CZEKAJ, DAVID J

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2613

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/936,137

Applicant(s)

KLEIN GUNNEWIEK ET AL.

Examiner

Dave Czekaj

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 6-19 is/are rejected.
- 7) ☒ Claim(s) 2-5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 September 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 6-7, 9-13, and 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Chiang et al. (6160846), (hereinafter referred to as "Chiang").

Regarding claims 1, 12, and 18, Chiang discloses an apparatus that recursively adjusts the quantizer scale to maintain the overall quality of the video (Chiang: column 1, lines 10-14). This apparatus comprises "providing blocks of quantized transform coefficients" (Chiang: column 7, lines 36-59, wherein the quantization module provides the blocks of quantized transform coefficients) and "attenuating higher-frequency coefficients more than lower-frequency coefficients" (Chiang: column 7, lines 60-67, wherein the attenuating the higher coefficients more than the lower coefficients is quantizing the high frequencies more coarsely with fewer allowed values than lower frequencies).

Regarding claim 6, Chiang discloses "decoding blocks of quantized coefficients to obtain a reconstructed picture rather than decoding the attenuated high-frequency coefficients" (Chiang: figure 1, column 9, lines 24-24, wherein the

decoding is started by the inverse quantization module. The examiner notes that since the high-frequency coefficients have been previously attenuated, only the blocks of the quantized coefficients are being decoded).

Regarding claim 7, Chiang discloses "attenuating high frequency coefficients in a plurality of blocks, wherein the blocks are attenuated depending on their content" (Chiang: column 7, lines 36-67, wherein the plurality of blocks are the 8x8 blocks, the content of the block is what indicates the block as high or low frequency).

Regarding claim 9, Chiang discloses "blocks with an energy content higher than other blocks are less attenuated than the other blocks" (Chiang: column 7, lines 60-67, wherein the high and low energy blocks are the high and low frequencies).

Regarding claim 10, Chiang discloses "at least one high-frequency transform coefficient is not attenuated" (Chiang: column 7, lines 60-67, wherein the fewer allowed values indicate at least one high-frequency transform coefficient that is not attenuated).

Regarding claim 11, Chiang discloses "at least one high frequency coefficient has a frequency higher than a frequency threshold and an amplitude higher than an amplitude threshold" (Chiang: column 7, lines 44-47, wherein the threshold for visibility encompasses the frequency and amplitude thresholds used to distinguish between high and low frequency blocks. The high frequency

blocks would have coefficient values higher than the thresholds and the low frequency blocks would have values lower than the thresholds).

Regarding claim 13, Chiang discloses "means for obtaining a signal" (Chiang: figure 1, wherein the signal is the video image which is shown to be obtained) and "a device for encoding the signal" (Chiang: figure 1, wherein the device is the encoder).

Regarding claim 19, Chiang discloses a "storage medium" (Chiang: figure 1, wherein the storage medium is the buffer).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang et al. (6160846), (hereinafter referred to as "Chiang") in view of Lee (6763070).

Regarding claim 8, note the examiners rejection for claim 1, and in addition, claim 8 differs from claim 1 in that claim 8 further requires the chrominance blocks to be less attenuated than the luminance blocks. Lee teaches that the human eye is more sensitive to luminance than to chrominance of an image and discloses attenuating the luminance and chrominance coefficients (Lee: column 2, lines 6-27, wherein the attenuating is reducing the levels). Therefore, it would have been obvious to one having ordinary skill in the

art at the time the invention was made to take the apparatus disclosed by Chiang and add luminance and chrominance attenuating in order to obtain an apparatus that operates more efficiently by reducing data that is not visible to a user.

5. Claims 14-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang et al. (6160846), (hereinafter referred to as "Chiang") in view of Hua et al. (6477706), (hereinafter referred to as "Hua").

Regarding claims 14 and 15, note the examiners rejection for claims 1 and 6, and in addition, claims 14 and 15 differ from claims 1 and 6 in that claims 14 and 15 further require a bit rate transcoder. Hua teaches that a transcoder can take a first stream having a characteristic input data rate to form an output stream having an output rate (Hua: column 3, lines 9-15). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Chiang and add the transcoder taught by Hua in order to obtain an apparatus that is more versatile by being able to change stream rates in accordance with different types of transmission channels.

Regarding claim 16, Hua discloses "requantizing the quantized coefficients" (Hua: column 6, lines 19-21), "a feedback loop for compensating requantization error" (Hua: figure 4A, column 6, lines 45-51, wherein the feedback loop is the loop illustrated in the figure), and "attenuating high-frequency coefficients of the requantized coefficients" (Hua: column 6, lines 19-34, wherein the high frequency coefficients are the high frequency components).

Regarding claim 17, note the examiners rejection for claims 13 and 14.

***Allowable Subject Matter***

6. Claims 2-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

|            |         |                    |
|------------|---------|--------------------|
| US-6567562 | 05-2003 | Nakayama et al.    |
| US-6215824 | 04-2001 | Assuncao, Pedro A. |
| US-5822462 | 10-1998 | Miyake, Nobutaka   |
| US-5657015 | 08-1997 | Nakajima et al.    |
| US-6396955 | 05-2002 | Abe, Nobuaki       |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (703) 305-3418. The examiner can normally be reached on Monday - Friday 9 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
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